

0-36-600327-2

15 September 1966

TYPE II SYSTEM
CONTRACT O-TM-483

Subject: Ground Pre-Conditioning Equipment

Reference: Report No. 136-070, dated 1 April 1965
"Contingent Phase I & II Special Activity Requirements"
Our Message 1640 (May 1965)

PROBLEM:

The thermal profile of the Article skin and Q Bay (for presently scheduled missions) is such that ground pre-conditioning of the Q Bay environment and configuration mirror surfaces is required prior to take-off.

DISCUSSION:

Package testing [] during recent months has definitely pointed out the need for a ground pre-heat cycle when using the Type II configuration. Without pre-heat, the unpredictable and varying thermal profile during that portion of the mission prior to "Camera On" would result in system output degradation due to temperature gradients in the mirror and window surfaces. There is one set of pre-conditioning equipment now in use [] which is operating satisfactorily.

25X1

25X1

CONCLUSION:

Ground pre-conditioning of the Type II equipment is necessary until such time that the mission profile provides approximately 100 minutes of full alt-speed flight prior to "Camera On".

The one set of ground pre-conditioning equipment limits the simultaneous launch capability of the Type II system to one unit.

The one set of ground pre-conditioning equipment provides no back-up should there be operating problems with the present unit.

There are no spare parts for the existing one set of ground pre-conditioning equipment.

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RECOMMENDATION:

It is once again recommended that one additional set of Type II ground pre-conditioning equipment be procured. Procurement of spare parts is not recommended due to the integral design of the basic components.

R.O.M. TIME-COST ESTIMATE:

Air-conditioning Cart (per each) 6 months

Pre-Heat Cart (per each) 90 days

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ATTACHMENT 3